

NAVAL AIR STATION LEMOORE  
1999 ANNUAL WATER QUALITY REPORT

NASL is required to distribute to its drinking customers an annual report on the quality of water provided during the previous calendar year. The following listings show measured range (low - high), average values, the units of the constituents tested and the maximum contaminant levels (MCLs) for each constituent. MCLs are set by State and Federal Safe Drinking Water regulations and are separated into two major categories: primary and secondary standards. Primary standards are related to public health and secondary standards are related to aesthetic qualities such as taste, odor and color. The test results shown are summarized from numerous tests made by independent State certified laboratories. The test results indicate that the water provided meets water quality standards

NASL's source of water supply is surface water obtained from the California Aqueduct and delivered through the Westlands Water District's distribution system to the Base Treatment Plant. The surface water source received complete treatment at NASL's treatment plant which has a design capacity of 7.5 MGD (million gallons per day). The treatment process provided consists of coagulation, flocculation and clarification provided by an unflow clarifier, filtration and disinfection.

**Definitions:**

**Maximum contaminant level (MCL):** the maximum permissible level of contamination in water.

**Coagulation:** forms clusters or "flocs".

**Flocculation:** forms small clumps or tufts.

**Clarification:** removal of bulk water from a dilute suspension of solids by gravity sedimentation, aided by chemical flocculation agents.

**Filtration:** separating suspended solids from a liquid by forcing the mixture through a porous barrier.

**Disinfection:** destroys harmful microorganisms.

Chlorination is provided for disinfection purposes and algae control. A layer of activated carbon has been installed on top of the regular filter media to assist in filtration. Corrosion control treatment is also provided which consists of the addition of a corrosion inhibitor, zinc orthophosphate, to the plant filter effluent. After the water produced is stored in seven ground level storage tanks which have a total capacity of 5.6 million gallons (MG). The distribution system serves all three areas or pressure zones: Administration, Housing and Operations.

Table 1: Information on water produced in 1999:

Maximum Month (July)----139 MG

Maximum Day (8 July)-----5.2 MG

If you have any questions regarding this notice, please call: Department of Health Services  
of Drinking Water Environmental Management: (559) 297-3883 or John Brennan, NASL  
Water Plant Foreman: (559) 998-3806.

MICROBIOLOGICAL					MCL	No. of months failed
Coliform Bacteria-Sampled Monthly					Two or more samples positive for coliform bacteria in a month	NONE

CONSTITUENT	UNITS	CALIFORNIA MCL (mg/L)	CALIFORNIA PHG (mg/L)	FEDERAL MCLG (MG/L)	SURFACE WATER SYSTEM RANGE	SURFACE WATER SYSTEM AVERAGE
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PRIMARY INORGANICS						
Aluminum	mg/l	1	N/A	N/A	0.27	0.27
Antimony	mg/l	0.006	0.02		ND	ND
Arsenic	mg/l	0.05	N/A	N/A	ND	ND
Barium	mg/l	1	N/A	2	ND	ND
Beryllium	mg/l	0.004	N/A	0.004	ND	ND
Cadmium	mg/l	0.005	N/A	0.005	ND	ND
Chromium	mg/l	0.05	N/A	N/A	ND	ND

CONSTITUENT	UNITS	CALIFORNIA MCL (mg/L)	CALIFORNIA PHG (mg/L)	FEDERAL MCLG (MG/L)	SURFACE WATER SYSTEM RANGE	SURFACE WATER SYSTEM AVERAGE
Mercury	mg/l	0.002	N/A	0.002	ND	ND
Nickel	mg/l	0.1	N/A	0.1	ND	ND
Nitrate (as NO3)	mg/l	45	45		ND	ND
Selenium	mg/l	0.05	N/A	0.05	ND	ND
Thallium	mg/l	0.002	N/A	0.0005	ND	ND
Lead	mg/l	.015 (AL)	0.002		ND - ND	ND
<b>ASBESTOS</b>						
Asbestos Tested in 1996 (required every 9 years)	MFL	7	N/A	7 MFL	ND	ND
<b>SECONDARY STANDARDS</b>						
Aluminum	mg/l	0.2	N/A	N/A	0.27	0.27
Color	mg/l	15			10	10
Copper	mg/l	1.3 (AL)5	0.17		ND	ND
Corrosivity	mg/l	Non-corrosive			-0.73	-0.73
Foaming Agents (MBAS)	mg/l	0.5			ND	ND
Iron	mg/l	0.3			0.3	0.3
Manganese	mg/l	0.05			ND	ND
Odor	mg/l	3			ND	ND
Silver	mg/l	0.1			ND	ND
Turbidity	NTU	5			0.2	0.2
Zinc	mg/l	5			0.43	0.43
<b>GENERAL MINERALS</b>						
Bicarbonate	mg/l	N/A			60	60
Carbonate	mg/l	N/A			0	0
Hydroxide Alkalinity	mg/l	N/A			0	0
Calcium	mg/l	N/A			10	10
Magnesium	mg/l	N/A			16	16
Sodium	mg/l	N/A			48	48
Total Hardness	mg/l	N/A			91	91
pH	Units	N/A			7.48	7.48
<b>SECONDARY STANDARDS</b>						
Total Dissolved Solids	mg/l	500-1000;1500			330	330
Specific Conductance	micro-ohms	900-1600;2200			409	409
Chloride	mg/l	250-500;600			53	53
Sulfate	mg/l	250-500;600			66	66
<b>VOLATILE ORGANIC CHEMICALS (VOCs)</b>						
Benzene	mg/l	0.001	N/A	0	ND	ND
Carbon Tetrachloride	mg/l	0.0005	N/A	0	ND	ND
1,2-Dichlorobenzene	mg/l	0.6	0.6		ND	ND
1,4-Dichlorobenzene	mg/l	0.005	0.006		ND	ND
1,1-Dichloroethane	mg/l	0.005	N/A	N/A	ND	ND
1,2-Dichloroethane	mg/l	0.0005	N/A	0	ND	ND
1,1-Dichloroethylene	mg/l	0.006	N/A	0.007	ND	ND
Cis-1,2-Dichloroethylene	mg/l	0.006	N/A	0.07	ND	ND
Trans-1,2-Dichloroethylene	mg/l	0.01	N/A	0.1	ND	ND
Dichloromethane	mg/l	0.005	N/A	0	ND	ND
1,2-Dichloropropane	mg/l	0.005	N/A	0	ND	ND
1,3-Dichloropropene	mg/l	0.0005	N/A	N/A	ND	ND
Ethylbenzene	mg/l	0.7	0.3		ND	ND
Monochlorobenzene	mg/l	0.07	N/A	0.1	ND	ND
Styrene	mg/l	0.1	N/A	0.1	ND	ND

CONSTITUENT	UNITS	CALIFORNIA MCL (mg/L)	CALIFORNIA PHG (mg/L)	FEDERAL MCLG (MG/L)	SURFACE WATER SYSTEM RANGE	SURFACE WATER SYSTEM AVERAGE
1,1,2,2-Tetrachloroethane	mg/l	0.001	N/A	N/A	ND	ND
Tetrachloroethylene	mg/l	0.005	N/A	0	ND	ND
Toluene	mg/l	0.15	N/A	1	ND	ND
1,2,4-Trichlorobenzene	mg/l	0.07	N/A	0.07	ND	ND
1,1,1-Trichloroethane	mg/l	0.2	N/A	0.2	ND	ND
1,1,2-Trichloroethane	mg/l	0.005	N/A	0.003	ND	ND
Trichloroethylene	mg/l	0.005	N/A	0	ND	ND
Trichlorofluoromethane	mg/l	0.15	0.7		ND	ND
1,1,2-Trichloro-1,2,2-Trifluoroethane	mg/l	1.2	N/A	N/A	ND	ND
Vinyl Chloride	mg/l	0.0005	N/A	0	ND	ND
Xylenes (Total)	mg/l	1.75	1.8		ND	ND
<b>SEMI-VOLATILE ORGANIC CHEMICALS (SOCs) (required every 3 years) last tested 4/97</b>						
2,4-D	mg/l	0.07	0.07		ND - ND	ND
Alachlor	mg/l	0.002	0.004		ND - ND	ND
Atrazine	mg/l	0.003	N/A	0.003	ND - ND	ND
Endothall	mg/l	0.1	0.58		ND - ND	ND
Simazine	mg/l	0.004	N/A	0.004	ND - ND	ND
<b>UNREGULATED VOCs</b>						
Bromodichloromethane	mg/l	N/A			.0081 - .04	0.024
Bromoform	mg/l	N/A			0.0058 - 0.031	0.0184
Chlorodibromomethane	mg/l	N/A			0.0024 - 0.019	0.0107
Chloroform	mg/l	N/A			0.016 - 0.064	0.04
Total Trihalomethanes	mg/l	0.1			0.035 - 0.15	0.0925
<b>RADIOACTIVITY</b>						
Gross Alpha Activity Tested in 1998/99 (required every 4 years)	pCi/l	15			.82 - 4.15	2.48

MCL - Maximum contaminant level

PHG - Public Health Goal

MCLG - Maximum Contaminant Level Goal

MFL - Million fibers per liter

AL - Action Level

N - Nitrate or Nitrite-Nitrogen

N/A - None Available

mg/l - milligrams per liter (parts per million)

pCi/l - pico Curies per liter

ND - None Detected

NTU - Nephelometric Turbidity Units